

Claims

1. A method of processing gunned concrete by means of a spraying machine (1), in which additives (12) can be introduced into the concrete to be sprayed before it leaves a spray nozzle (6), characterized in that at least one additive (12) which has a proportion of solids is mixed with water in at least one mixing apparatus (8) and is fed from the at least one mixing apparatus (8) into the concrete to be sprayed before it leaves the spray nozzle (6).
2. The method of processing gunned concrete as claimed in claim 1, characterized in that at least two mixing apparatuses (8) in which at least two different, in particular incompatible, additives (12) are processed are used.
3. The method of processing gunned concrete as claimed in claim 1 or 2, characterized in that only the amount of additive (12) which is required for the processing of the gunned concrete is liquefied.
4. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that the additive (12) is mixed with water in a mixer (11) or a permanent mixer (19).
5. The method of processing gunned concrete as claimed in claim 4, characterized in that the additive (12) which has been mixed with the water is pumped by means of a circulation line (16) out of and back into the mixer (11).

6. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that the additive (12) is added to the water via a metering device (13) and/or in that the water is added to the additive (12) via a metering valve (15).
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7. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that the liquid additive mixture is introduced by means of a metering pump (18) or a metering valve (18) into the concrete to be sprayed and the amount of liquid additive mixture to be introduced is set.
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8. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that the ratio of additive (12) to water is set as a function of the concrete used and its content of hydraulic binder.
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9. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that the ratio of additive (12) to water and the amount of liquid additive mixture to be introduced into the concrete to be sprayed is effected by means of a control and/or regulating unit.
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10. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that the liquid additive mixture has a proportion of the additive (12) of from 5 to 95% by weight, preferably from 40 to 80% by weight, particularly preferably from 40 to 60% by weight.
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11. The method of processing gunned concrete as claimed in any of the preceding claims,
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characterized in that the additive (12) has a solids content of at least 1%, preferably above 10%, particularly preferably above 50%, in particular above 80%.

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12. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that a pulverulent additive is used as additive (12).

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13. The method of processing gunned concrete as claimed in any of the preceding claims, characterized in that an accelerator is used as additive (12).

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14. A spraying machine (1) for processing gunned concrete, in which additives (12) can be introduced into the concrete to be sprayed before it leaves a spray nozzle (6), characterized in that a mixing apparatus for mixing water with at least one additive (12) which has a proportion of solids is actively connected to the spraying machine.

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15. The spraying machine as claimed in claim 14, characterized in that the mixing apparatus (8) comprises means of introducing water (9, 15) and additives (10, 13, 14) and also at least one mixer (11) and/or a permanent mixer (19).

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16. The spraying machine as claimed in claim 14 or 15, characterized in that the at least one additive (12) is pulverulent and/or an accelerator.